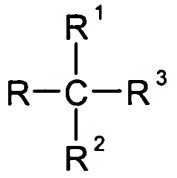
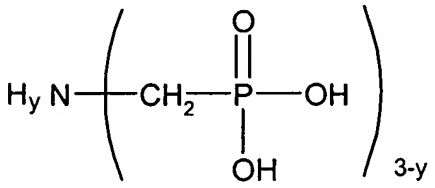
1. (currently amended): A process for the flame-retardant treatment of a fiber product which contains from 20 to 100% by weight of cellulose fibers, based on the weight of the anhydrous fiber product, the fiber product or ~~preferably~~ a precursor thereof being treated in succession or simultaneously with a component A and a component B, component A being a branched polyethylenimine which contains primary, secondary and tertiary amino groups and which has a weight average molecular weight in the range from 5000 to 1 500 000, ~~preferably from 10 000 to 1 000 000,~~ and in which the numerical ratio of secondary amino groups to primary amino groups is in the range from 1.00 : 1 to 2.50 : 1 and the numerical ratio of secondary amino groups to tertiary amino groups is in the range from 1.20 : 1 to 2.00 : 1,

or component A being a mixture of such polyethylenimines,

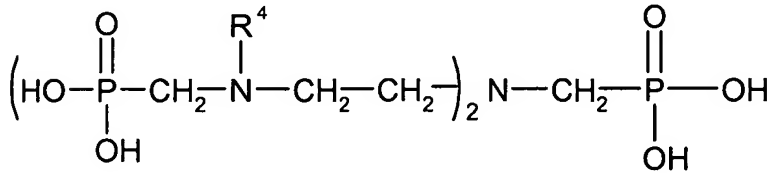
component B being a phosphonic acid of the formula (I), (II) or of the formula (III)



(I)



(II)



(III)

in which, in the formulae (I), (II) or (III), in up to 50% of the OH groups bonded to phosphorus the hydrogen atom may be substituted by an alkali metal or an ammonium group, ~~but preferably 100% of these OH groups being present in unneutralized form,~~

or component B being a mixture of compounds which are selected from compounds of the formulae (I), (II) or (III),

in which

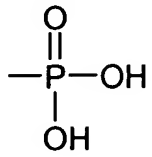
y may assume the values 0, 1 or 2 ~~and preferably has the value 0~~,

R^1 is H or OH,

R is a linear or branched alkyl radical which contains 1 to 7 carbon atoms when R^1 is OH and 3 to 7

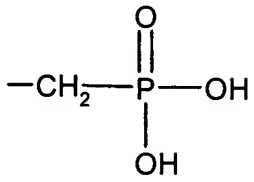
carbon atoms when R^1 is H,

R^2 being

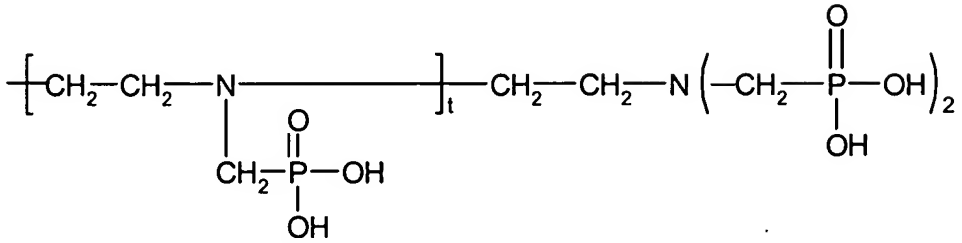


R^3 being H or R^2, ~~preferably R^2,~~ and

all radicals R^4, independently of one another, being H or

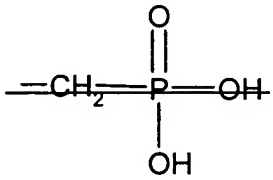


or being a radical of the formula (IV)



(IV)

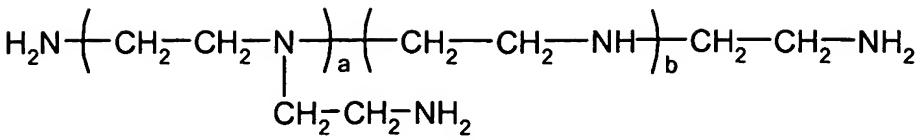
~~it being preferable if from 50 to 100% of all radicals R^4 present are~~



t being 0 or a number from 1 to 10.

2. (currently amended): The process as claimed in claim 1, wherein ~~characterized in that~~ component B is a mixture of phosphonic acids of the formula (I) and of the formula (II), both of which are present in completely unneutralized form.

3. (currently amended): The process as claimed in claim 1 ~~or 2~~, wherein ~~characterized in that~~ component A is a polyethylenimine which is formed by polymerization of ethylenimine and which has the ~~following~~ structure (V) ~~(formula (V))~~



(V)

the polymerization optionally being acid-catalyzed,
it being possible for the individual units which contain tertiary amino groups and the individual units which contain secondary amino groups to be arbitrarily distributed over the polymer chain,
b being greater than a and a and b having values such that the conditions, mentioned in claim 1, for the molecular weight and for the numerical ratios of the amino groups to one another are fulfilled
or component A being a mixture of such polyethylenimines.

4. (currently amended): The process as claimed in ~~one or more of claims 1 to 3~~ claim 1, wherein ~~characterized in that~~ the weight ratio of the amount of component A applied to the fiber product or to the precursor thereof to the amount of component B applied is in the range from 1 : 1.3 to 1 : 4.0.

5. (currently amended): The process as claimed in ~~one or more of claims 1 to 4~~ claim 1, wherein ~~characterized in that~~ component A and/or component B are applied in the form of a mixture with water to the fiber product or to a precursor thereof.

6. (currently amended): The process as claimed in ~~one or more of claims 1 to 5~~ claim 1, wherein ~~characterized in that~~ the precursor of the fiber product is present as an aqueous suspension of fibers.

7. (currently amended): The process as claimed in ~~one or more of claims 1 to 6~~ claim 1, wherein ~~characterized in that~~ neither component A nor component B contains metals or metal compounds.

8. (currently amended): The process as claimed in ~~one or more of claims 1 to 7~~ claim 1, wherein, ~~characterized in that,~~ in addition to the components A and B, polymaleic acid or partly neutralized polymaleic acid and/or a partial ester of orthophosphoric acid is also applied to the fiber product or the precursor thereof.

9. (currently amended): The process as claimed in ~~one or more of claims 1 to 8~~ claim 1, wherein ~~characterized in that~~ a precursor of the fiber product is treated simultaneously or in succession with a component A and a component B, ~~the component A preferably being applied earlier than the component B,~~ and ~~that~~ this precursor is then further processed under the action of heat and pressure

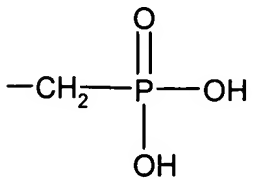
to give a fiberboard or pressboard, this fiberboard or pressboard is then comminuted and is washed with water which contains one or more inorganic salts, then treated again with a component B and further processed under the action of heat and pressure to give a fiberboard and pressboard.

10. (new): The process as claimed in claim 1, wherein component B is a phosphonic acid in which 100% of the OH groups bonded to phosphorus are present in unneutralized form.

11. (new): The process as claimed in claim 1, wherein y has the value 0.

12. (new): The process as claimed in claim 1, wherein R^3 is R^2.

13. (new): The process as claimed in claim 1, wherein 50 to 100% of all radicals R^4 present are



14. (new): The process as claimed in claim 9, wherein component A is applied earlier than the component B.